Listing of the Claims

Claims 1-7 (Cancelled)

8. (Currently Amended) A method for transmitting data from communication terminals to a switching system via a packet-oriented communication network, comprising the steps of:

setting up a data format formed of substructural elements for a data transmission between a switching system and a plurality of communication terminals, said communication terminals being connected to a packet oriented communication network via a hub with subscriber interfaces for each of said communication terminals, said switching system being connected to said packet-oriented communication network via an access unit separate from the hub,

transmitting said data in a form of substructural elements to said hub by one of said communication terminals,

inserting said substructural elements into data packets by said hub,

inserting further substructural elements from another communication terminal into said data packets, such that said substructural elements and said further substructural elements are inserted into common data packets, transmitting said data packets to the access unit via the packet-oriented communication network, and

extracting said substructural elements from said data packets by said access unit, and forwarding said substructural elements to said switching system by said access unit, wherein said data packets are structured as Internet Protocol data packets.

9. (Currently Amended) A method for transmitting data from a switching system to communication terminals via a packet-oriented communication network, comprising the steps of:

setting up a data format formed of substructural elements for a data transmission between a switching system and a plurality of communication terminals, said communication terminals being connected to a packet oriented communication network via a hub with subscriber interfaces for each of said communication terminals, said switching system being connected to said packet-oriented communication network via an access unit separate the hub,

transmitting said data in a form of substructural elements to the access unit by said switching system,

inserting said substructural elements from another communication terminal into said data packets by said access unit, such that said substructural elements and said further substructural elements are inserted into common data packets,

transmitting said data packets to the hub via the packet oriented communication network,

extracting said substructural elements from said data packets via said hub, and forwarding said substructural elements to a corresponding communication terminal, wherein said data packets are structured as Internet Protocol data packets.

10. (Cancelled)

11. (Previously Presented) A method according to claim 8, wherein each substructural element exhibit a cell header, said cell header storing a channel identifier for designating an association of said each substructural element with a communication terminal, said cell header further storing a length indicator for specifying a number of payload segments transmitted in said each substructural element.

12. (Previously Presented) A method according to claim 8, wherein said substructural elements are structured according to an ATM data format in accordance with a convention known as Second ATM adaptation layer.

13. (Currently Amended) A method according to claim ~~10~~8, further comprising the step of: arranging said data transmission and said substructural elements in a payload area of an Internet Protocol data packet such that a substructural element begins in a segment defined as a first payload segment of the Internet Protocol data packet.

14. (Previously Presented) A method according to claim 13, further comprising the step of:

defining a pointer in said first payload segment for designating a start address of a first substructural element segment, said first substructural element located in the payload area of the Internet Protocol data packet.

15. (Currently Amended) A method for transmitting data from communication terminals to a switching system via a packet-oriented communication network, comprising the steps of:

setting up a data format formed of substructural elements for a data transmission between a switching system and communication terminals, said communication terminals being connected to a packet oriented communication network via a hub, said switching system being connected to said packet-oriented communication network via an access unit separate from the hub,

transmitting said data in a form of substructural elements to said hub by a communication terminal,

inserting said substructural elements into data packets by said hub, such that substructural elements from different communication terminals are inserted into common data packets,

transmitting said data packets to the access unit via the packet-oriented communication network, and

extracting said substructural elements from said data packets at said access unit, and forwarding said substructural element from said access unit to said switching system, wherein said data packets are structured as Internet Protocol data packets.

16. (New) A method for transmitting data from communication terminals to a switching system via a packet-oriented communication network, comprising the steps of:

setting up a data format formed of substructural elements for a data transmission between a switching system and a plurality of communication terminals, said communication terminals being connected to a packet oriented communication network via a hub with subscriber interfaces for each of said communication terminals, said switching system being connected to said packet-oriented communication network via an access unit separate from the hub,

transmitting said data in a form of substructural elements to said hub by one of said communication terminals,

inserting said substructural elements into data packets by said hub,

inserting further substructural elements from another communication terminal into said data packets, such that said substructural elements and said further substructural elements are inserted into common data packets, transmitting said data packets to the access unit via the packet-oriented communication network, and

extracting said substructural elements from said data packets by said access unit, and forwarding said substructural elements to said switching system by said access unit,

wherein each substructural element exhibit a cell header, said cell header storing a channel identifier for designating an association of said each substructural element with a communication terminal, said cell header further storing a length indicator for specifying a number of payload segments transmitted in said each substructural element.

17. (New) A method, for transmitting data from communication terminals to a switching system via a packet-oriented communication network, comprising the steps of:

setting up a data format formed of substructural elements for a data transmission between a switching system and a plurality of communication terminals, said communication terminals being connected to a packet oriented communication network via a hub with subscriber interfaces for each of said communication terminals, said switching system being connected to said packet-oriented communication network via an access unit separate from the hub,

transmitting said data in a form of substructural elements to said hub by one of said communication terminals,

inserting said substructural elements into data packets by said hub,

inserting further substructural elements from another communication terminal into said data packets, such that said substructural elements and said further substructural elements are inserted into common data packets, transmitting said data packets to the access unit via the packet-oriented communication network, and

extracting said substructural elements from said data packets by said access unit, and forwarding said substructural elements to said switching system by said access unit,

wherein said substructural elements are structured according to an ATM data format in accordance with a convention known as Second ATM adaptation layer.